

A monitoring system identifies a wet diaper by embedding an inexpensive disposable passive humidity sensor, and attaching to the outside of the diaper a detachable transmitting module that is triggered into transmission by the humidity sensor. The transmitting module is sealed and transferable from the wet diaper to a dry one. Uniquely coded data is wirelessly transmitted to a remote receiver. The receiver may be a battery powered portable unit carried by the baby's guardian. In a day care center a multiple function receiver can identify any of several diapers. In hospitals, several strategically located receivers are each capable of recognizing and reporting any wet diaper within its range to a central computer. Low cost and long range are achieved by using a detachable and transportable active transmitter that is not discarded with the wet diaper and therefore can be re-used. False transmissions are prevented by a confirmatory resistance.